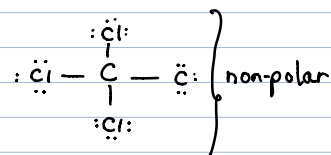


1. An experiment has shown that not all molecular compounds with the chemical formula YZ_4 dissolve in liquid carbon tetrachloride. How could this be?



① - Polarity

↳ CCl_4 non-polar

↳ Some YZ_4 non-polar so dissolve in CCl_4

↳ Some YZ_4 polar so don't dissolve in CCl_4

② Add some more info:

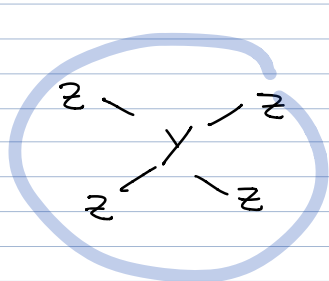
↳ non-polar interact through LDF

↳ Polar \rightarrow dipole dipole
H-bond

↳ intermolecular forces between polar compound stronger than the intermolecular forces between polar and non-polar.

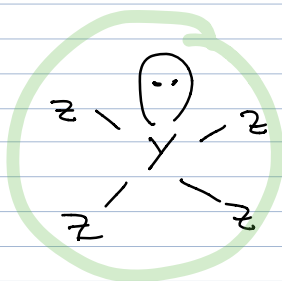
③ Add some more info

↳ Talk about shapes.



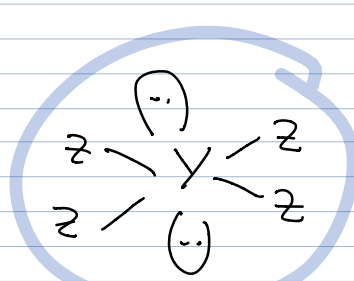
non-polar

tetrahedral
Can dissolve



Polar

seesaw
Cannot dissolve



non-polar

square planar
Can dissolve